

REMARKS

Claims 1-30 are currently pending, wherein claims 1, 20, 25, and 29 have been amended to correct typographical errors. Applicant respectfully requests favorable reconsideration in view of the remarks presented herein below.

At the outset, Applicant notes with appreciation the indication that claims 3, 4, 20-22, and 26 contain allowable subject matter and would be allowed if rewritten in independent form.

On page 2 of the Office Action (“Action”), the Examiner objects to claim 20 because the phrase “the mixing console” lacks antecedent basis. Applicant hereby amends claim 20 to replace the phrase “the mixing console” with “the receiving unit”, thereby addressing the Examiner’s concerns.

Further on page 2, the Examiner rejects claim 25 under 35 U.S.C. 112, second paragraph as being indefinite. More specifically, the Examiner asserts that the phrase “such as” renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Applicant hereby amends claims 1 and 25 to remove the phrase “such as”, thereby rendering this rejection moot. Accordingly, Applicant respectfully request reconsideration and withdrawal of the rejection of claim 25 under 35 U.S.C. 112, second paragraph.

Still further on page 2, the Examiner rejects claims 1, 2, 8-18, 23, 24, and 27-30 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,993,073 to Sparkes (“Sparkes”), in view of U.S. Patent No. 4,479,240 to McKinley, Jr. (“McKinley”). Applicant respectfully traverses this rejection.

In order to support a rejection under 35 U.S.C. §103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria

must be met. First, there must be some motivation to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 1, 2, 8-18, 23, 24, and 27-30 are not rendered unpatentable over the combination of Sparkes and McKinley because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

Independent claims 1 and 29 define a system and method, respectively, for receiving audio signals from a plurality of microphones and transferring the audio signals via a common composite signal channel to a receiving unit. The system includes, *inter alia*, at least two satellite units, each having a microphone signal input, a composite signal channel input, and summing means for summing a microphone signal and a composite signal; and a master unit having a composite signal channel input and signal converting means for converting the composite signal into a master signal which is provided to the receiving unit via a master signal output. In addition, each satellite unit is connected to the common composite signal channel such that the microphone signal received at the respective satellite unit is added to the composite signal which is fed to the master unit.

In rejecting claims 1 and 29, the Examiner asserts that Sparkes discloses a system for receiving audio signals from a plurality of microphones that includes, satellite units 29-33 having a microphone input and composite signal input and summing means as claimed, and that McKinley discloses an audio mixing console including external processing equipment 18 used for adding special effects to a signal which the Examiner asserts is equivalent to the master unit as claimed. Therefore, the Examiner concludes that it would have been obvious to one skilled in the art "to modify Sparkes to include the master unit of McKinley for the purpose of adding

special effects to the mixed signal, thereby increasing the enjoyment of the sound mixing listening environment.” This assertion is unfounded for the following reason.

The mere fact that references can be combined does not in and of itself render the resultant combination obvious absent some suggestion of the desirability of the combination. (See §2143.02 of the MPEP). In the present case, the Examiner asserts that one skilled in the art would have been motivated to modify the system of Sparkes to include external processing equipment as disclosed by McKinley in order to add special effects to the mixed signal. As disclosed by McKinley these “special effects” include reverberation, echo, and delays. However, as disclosed at column 7, lines 58-66 of Sparkes, the digital signal processor 51 (included in each channel input circuitry) is capable of performing any one of a large number of special effects, such as reverberation, echo, compression and the like. Accordingly, one skilled in the art would not have been motivated to modify the system of Sparkes to include external processing equipment in order to achieve functionality achievable without modification. Accordingly, absent proper motivation to modify the system of Sparkes, the rejection of claims 1 and 29 is improper.

In addition, even if one skilled in the art were motivated to combine Sparkes and McKinley, which Applicant does not concede, the combination would still fail to render claims 1 and 29 unpatentable because the combination fails to disclose each and every claimed element. One skilled in the art would readily recognize that the receiving unit and the satellite units are different entities and that the satellite units are positionable at a distance from the receiving unit. However, both Sparkes and McKinley disclose input channels which are located within the receiving unit, and not separate units which can be positioned away from the receiving unit.

Claim 2, which depends from independent claim 1, defines a system for receiving audio signals that includes, in addition to the elements of claim 1, that the composite signal output of a first satellite unit is connected to the composite signal channel input of the master unit, the composite signal output of a second satellite unit is connected to the composite signal input of the first satellite unit, and signals received at the composite signal input and at the microphone signal input of the respective satellite units are added by the respective summing means and provided at the composite signal output.

In rejecting claim 2, the Examiner points to the combination of Sparkes and McKinley presented with regard to claim 1 as disclosing each and every claimed element. However, the external processing equipment 18 of McKinley, which the Examiner points to as being equivalent to the claimed master unit, receives input only from the mixing console 14. Therefore, even if one skilled in the art were motivated to modify the system of Sparkes to include external processing equipment as disclosed by McKinley, the combination would still fail to render claim 2 unpatentable because the external processing equipment does not include a composite signal channel input connected to the composite signal output of the first satellite unit as claimed.

Claim 13, which variously depends from independent claim 1, further defines that the summing circuit is an analog summing circuit. Accordingly, claim 13 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the summing circuit is an analog summing circuit. To the contrary, Sparkes specifically recites that the adder 55 is a 24 bit adder which combines two *digital* input signals.

In rejecting claim 13, the Examiner takes Official Notice that “it was obvious at the time of the invention to utilize digital or analog signal processing techniques.” It is unclear to Applicant whether the Examiner is taking Official Notice that both digital and analog signal processing techniques were known in the art, or that it would have been obvious to replace the digital adder of Sparkes with an analog summing circuit. Accordingly, Applicant will address both cases. Furthermore, should the Examiner maintain this rejection in a future Action, Applicant respectfully requests that the Examiner more clearly assert what he is taking Official Notice of in order to provide Applicant with sufficient information with which to respond.

In the first case, the rejection is improper because the mere fact that both digital and analog signal processing techniques were known at the time of the invention is not sufficient to render the required modification to the system of Sparkes obviousness absent some motivation to replace the digital adder as taught with an analog summing circuit as claimed. With regard to the second case, the use of Official Notice to assert the obviousness of a modification to a prior art system is *per se* improper.

Claim 15, which depends from claim 1, further defines that the converting means within the master unit comprises an amplifier circuit. Therefore, claim 15 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises an amplifier circuit.

In rejecting claim 15, the Examiner asserts that “there is obviously an amplifier circuit in the master unit 18 of McKinley.” It appears that the Examiner is asserting that the external processing equipment 18 of McKinley inherently includes an amplifier circuit. However, the Examiner provides no evidence that an amplifier circuit is necessarily required in the external

processing equipment of McKinley. Accordingly, absent explicit disclosure of an amplifier circuit or proper motivation to modify the external processing equipment of McKinley to include an amplifier circuit, the rejection of claim 15 is improper.

Claim 16, which depends from claim 1, further defines that the converting means within the master unit comprises a transformer. Therefore, claim 16 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises a transformer.

In rejecting claim 16, the Examiner asserts that “there is an obvious need for power in the master unit, therefore one of ordinary skill in the art would have been motivated to provide a transformer or its equivalent in order to provide power.” It appears that the Examiner is asserting that there is an inherent need for power, therefore, one skilled in the art would be motivated to utilize a transformer to provide the inherently needed power. However, there are numerous ways to provide power without utilizing a transformer in the master unit as asserted by the Examiner. Therefore, the mere fact that a transformer may provide power is not sufficient in and of itself to render the suggested modification obvious absent some motivation (i.e., suggestion of the desirability) to include a transformer in the master unit. Finally, claim 16 defines that the converting means includes a transformer not the master unit. Therefore, even if *arguendo*, one skilled in the art were motivated to include a transformer in the master unit to provide power as suggested by the Examiner, a power transformer in the master unit is not equivalent to the converting means including a transformer.

Claim 17, which depends from claim 1, further defines that the converting means within the master unit comprises an electronic balancing circuit. Therefore, claim 17 is patentable over

the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises an electronic balancing circuit.

In rejecting claim 17, the Examiner asserts that “balancing was a well known technique in the art of sound mixing in order to convey a specific audio listening environment.” However, the Examiner fails to provide any motivation for including a balancing circuit in the converting means as claimed. Furthermore, the system of Sparkes includes balancing means without modification. (See column 7, lines 58-61.) Therefore, one skilled in the art would not have been motivated to modify the system of Sparkes to achieve functionality achievable without modification.

Claim 23, which depends from claim 1, further defines that the master unit and the satellite units are each contained in a separate housing, and that they are interconnected by cables. Therefore, claim 23 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the master unit and the satellite units are each contained in a separate housing, and that they are interconnected by cables.

In rejecting claim 23, the Examiner points to column 5, lines 35-40 of Sparkes as disclosing that the satellite units and the master unit are each housed in a separate unit. In addition, the Examiner takes Official Notice that “it was obvious to connect them with cables.” The Examiner’s rejection is improper for the following reasons.

First, column 5, lines 35-40 of Sparkes clearly discloses that the input channels (which the Examiner equates to the claimed satellite units) are housed in the same housing (i.e., the mixer) in as much as each input is formed on a printed circuit board with edge connectors for

rapid connection and disconnection to a base mother board. In addition, as noted by the Examiner with regard to claim 1, Sparkes fails to disclose a master unit as claimed. Accordingly, the disclosure of Sparkes cannot be interpreted as disclosing a master unit in a separate housing.

Second, with regard to the Examiner's Official Notice, again it is unclear to Applicant whether the Examiner is taking Official Notice that the use of cables were known in the art, or that it would have been obvious to use cables in the system of Sparkes. In either case, the Examiner's assertion is unfounded.

First, the mere fact that cables are well known in the art is not sufficient to render there use obvious absent some motivation to replace the circuit connection of Sparkes with cables. Second, taking Official Notice to assert the obviousness of a modification to a prior art system is *per se* improper.

Claims 8-12, 14, 18, 24, 27, and 30 variously depend from independent claim 1. Therefore, claims 8-12, 14, 18, 24, 27, and 30 are patentable over the combination of Sparkes and McKinley for at least those reasons presented above with respect to claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 2, 8-18, 23, 24, and 27-30 under 35 U.S.C. §103(a).

On page 4 of the Action, the Examiner rejects claims 5-7, 19, and 25 under 35 U.S.C. §103(a) as being unpatentable over Sparkes in view of McKinley, further in view of U.S. Patent No. 6,246,773 to Eastty ("Eastty"). Applicant respectfully traverses this rejection.

Claims 5-7, 19, and 25 variously depend from independent claim 1. Therefore, claims 5-7, 19, and 25 are patentable over the combination of Sparkes and McKinley for at least those reasons presented above with respect to claim 1. Eastty discloses an audio signal mixing console

that utilizes an adaptive filter to correlate a first signal mixed from a stereo source and a second signal from a spot microphone source. However, Eastty fails to overcome the deficiencies of Sparkes and McKinley.

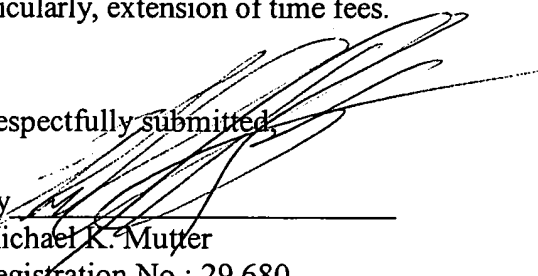
Accordingly, claims 5-7, 19, and 25 are patentable over the combination of Sparkes, McKinley, and Eastty because the Examiner fails to establish a *prima facie* case of obviousness as discussed above with respect to claim 1.

The application is in condition for allowance. Notice of same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Penny Caudle (Reg. No. 46,607) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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